Steb centers

I was enjoying the utility, efficiency, and flexibility of my chuck-mounted "steb" center recently, and decided it would make a good topic for discussion. I have no idea where the word "steb" came from, but it has been applied by Sorby to a center with a spring-loaded tip surrounded by a ring of sharp, serrated teeth. They are available as drive centers for the headstock, with either with a Morse Taper or as a chuck insert. There is also a live tail center version. They offer benefits for all turners from novice to expert and can be used with both spindles and side-grain blanks.

I use the steb center as a drive center – I've never used one in the tail stock, but the principles are the same. Mounting a blank with a steb center requires only that the two points of contact be center punched. The spring-loaded, stainless steel center point provides accurate and secure centering, for both initial and subsequent mountings, while at the same time not splitting the wood because the circular head distributes the pressure evenly around the serrated ring. This is particularly helpful on small spindles.

A novice turner can work with confidence because, with light pressure from the tailstock, this arrangement allows the work piece to slip if a tool catch results in a dig in, saving it, and the turner, from damage. As the turner becomes more experienced, pressure from the tailstock can be increased to grip the wood more firmly, with no slipping except for extreme cases, and to drive larger, heavier pieces of wood. This is much easier than using traditional 2- and 4-prong drive centers that generally have to be hammered into place before mounting. Super-aggressive turners may find some slippage when roughing and prefer other methods of holding the blank.

For more advanced turners in time-critical production turning, by varying tail-stock pressure, the work piece can be stopped for inspection at any time without shutting off the lathe -- simply back off the tailstock until the teeth disengage the work piece. This allows the center point to hold the work in place with the lathe still running. The steb center also allows for finished pieces to be removed and blanks replaced without turning the lathe off.

The bad news is that the Sorby centers, available from a wide variety of sources (Woodcraft, Packard, Hartville, etc.), are overly expensive, ranging from $60 - $100. The good news is that you can get good-quality equivalents from Penn State Industries (PSI), directly or from Amazon prime, for $15 to $20 for the drive centers and $40 for the live center. Needless to say, that's much more reasonable. Rocket science this is not. These copies have been very highly rated by customers on Amazon. I have used a copy for years with no problems. The Sorby versions come in sizes from ½" to 1-1/4" diameters. The Penn State varieties are available in 5/8" and 1" diameters. The PSI versions are called "spur" centers, undoubtedly to avoid patent problems.

One of the classic problems with the design of the Jet 1236 is that the backwards-facing motor body is too close to the spindle and gets in the way unless blanks are cut and mounted very straight. A side benefit of

using a chuck-mounted steb center is that it gets the face of the blank far enough away to add some flexibility for rough shapes.

I highly recommend that, if you haven't tried one of these, you get one and see if you don't agree that it is a great tool.

Always use common sense. Things that work in one situation may not work in another. Follow all Safety Rules. If it feels wrong, it probably is; stop and rethink. ***Y****our* ***M****ileage* ***M****ay* ***V****ary*